

STORY OF THE LAKE IN S39

BY

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John Gibson, Director of Thesis

Story of the Lake in S39

For Mixed Chamber Ensemble and Electronics

by **Jinghong Zhang**

2015

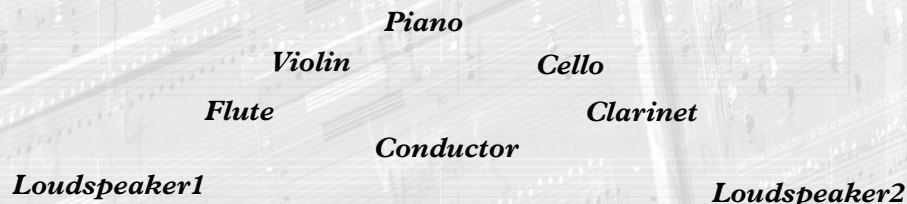
Program Notes

Story of the Lake in S39 depicts a lake in S39, a place that exists solely in the composer's imagination. The composer portrays the lake in a musical language, using texture and harmony to capture the environment, the details, and the events that take place around the lake.

Story of the Lake in S39 is a piece for interactive live electronics and mixed chamber ensemble. The electronic component uses the visual programming language, Max, in order to manipulate the sound of the acoustic instruments. By using various delay techniques, the composer makes each instrument sound like several, thus creating the effect of a large orchestral force. The result is a dense soundscape that captures the experience of the lake in S39 and its colorful scenery.

Performance Information

Stage Setup:



Electronics Requirements:

5 microphones

Position one mic close to each instrument, locating the piano mic close to its strings.

An audio interface with stereo output and at least 5 mic inputs

A laptop

(to run the Max patch that controls the electronics)

The Max patch is available from the composer upon request at jz36@JinghongZhang.com

Max Patch Operation for Electronics:

The patch operator should follow the instructions in the electronics part of the score to trigger each individual "Cue" button (Cues 1-11) in the patch.

The graphics in the Electronics part of the score represent the electronic sound, while the text inside parentheses describes what effects are applied to the electronics.

The Story of the Lake in S339

Instrumentation

Module 1 opened (multiplying channels to many times larger than original sound by multiple delay lines and reverb and pitch shifting effect)
Module 1 opened (multiplying channels to many times larger than original sound by multiple delay lines and reverb and pitch shifting effect)
1-Record Flute and Cello
2-Record Clarinet and Piano
2-Record Violin

Clarinet in B \flat

Piano

Violin

Cello

Conductor

Electronics

put your bow down and pizz.
put your bow down and pizz.

The Story of the Lake in S339

B

Module 1 opened (multiplying channels to many times larger than original sound by multiple delay lines and reverb and pitch shifting effect)

Module 1 opened (multiplying channels to many times larger than original sound by multiple delay lines and reverb and pitch shifting effect)

1-Record Flute and Cello

2-Record Clarinet and Piano

2-Record Violin

1-Record Flute and Cello


2-Record Clarinet and Piano

2-Record Violin

B

put your bow down and pizz.

put your bow down and pizz.



Story of the Lake in S39

Score in C

♩ = 76

Jinghong Zhang

Flute

Clarinet in B \flat

Violin

Violoncello

Piano

Ped. -----> (hold until released)

Cue 1 (low, full spectrum background sound, fixed media)

Electronics



Fl.

Cl.

Vln.

Vc.

Pno.

Pno.

A

11

Fl. *mf* *fp* *f* 3 *mp sub.*

Cl. *mf* *f sub.* *mp* *f*

Vln. *f sub.* *mp*

Vc. *f* *mp*

Pno. *p sub.* *mf* *f*

El.

15

Fl. *f* *mp sub.* *f* 6 *mp sub.* *f*

Cl. *f* *f sub.* *mp* *f* 3 *mp sub.* *f*

Vln. *fp* *mf sub.* *pizz.* *arco* *f* *mp* *f* *fp*

Vc. *f* *mp* *f* *mp* *f*

Pno. *mp sub.* *f* *mp sub.* *f*

El.

19

Fl.

5

mp

f

mp

f

5

6

Cl.

mp

f

6

5

3

3

mp

f sub.

mp

f sub.

Vln.

f

mp

glass.

f

mp

Vc.

3

5

3

3

5

3

Pno.

mp

f sub.

3

5

3

5

3

El.



23

Fl.

3

5

3

5

3

6

3

6

ff

Cl.

3

f

ff

Vln.

pizz.

ff

Vc.

6

7

5

5

6

ff

Pno.

ff

3

El.

B

28 8" 8" 8"

Fl. *f sub.*

Cl. *mp sub.*

Vln. *f sub.* pizz.

Vc. *f sub.*

Pno. *mp sub.* *f*

Cue 2 modulate dynamic according to the sound of the acoustic part

(multiplying inputs to voices by multiple delay lines, reverbs, pitch shift)

(Flute and Cello will be recorded automatically)

(Clarinet and Piano will be recorded)

(Violin will be recorded)



31 8" 8"

Fl. *ff* *mf*

Cl. *mf* *f*

Vln. *ff*

Vc. *ff*

Pno.

Cue 3 (uses effects based on Cue 2 and reverses the recorded sound)



8" 26" **C**

Fl. *ff*

Cl. *arco*

Vln. *ff*

Vc. *fff*
use hand to tap the body of cello to make bright, wooden sounds
f

Pno.

El.

Cue 4 (add Harmonizer effect based on Cue 3)

30" **30"**
play the tremolo in B when not playing the notes on the upper part

Fl. *ff*

Cl. *ff*
play these selected notes as fast as possible in order at first, and then later in random order
etc.

Vln. *ff*
irregular pulse

Vc. *ff*
play these notes as fast as possible in random order
etc.

Pno. *ff*

Pno.

D

♩ = 88

36

Fl. *f sub.*

Cl. *f sub.*

Vln. *f sub.*

Vc. *f sub.* arco

Pno. *f sub.* release pedal

Cue 5 (Wheat effect: a harsh and fuzzy sound)

El.



42

Fl.

Cl.

Vln.

Vc.

Pno.

El.

47

Fl.

Cl.

Vln.

Vc.

Pno.

El.



52

Fl.

Cl.

Vln.

Vc.

Pno.

El.

E

repeat box and wait for conductor's cue

repeat box and wait for conductor's cue

repeat box and wait for conductor's cue

repeat box and wait for conductor's cue

repeat box and wait for conductor's cue

F
Conductor cue Violin and Piano

play box 4 times

2 more times

Fl.

Cl.

Vln.

Vc.

Pno.

repeat box and wait for conductor's cue

ff sub.

ff sub.

Cue 6 (increase grain to 500 and speed to 5 ms for the Wheat effect in 6s)

El.

G
Conductor cue Cello

Conductor cue Violin

Fl.

Cl.

Vln.

Vc.

Pno.

ff sub.

ff sub.

Ped. -----> (hold until released)

Cue 7 (add metallic and brassy effects to piano and decrease wheat effect amount to a lower level in 12s)

El.

Conductor cue Flute

Fl.

Cl.

Vln.

Vc.

Pno.

El.

Conductor cue Clarinet

Conductor cue

Fl.

Cl.

Vln.

Vc.

Pno.

El.

H

Conductor cue

Musical score for measures 85-94. The score includes staves for Flute (Fl.), Clarinet (Cl.), Violin (Vln.), Viola (Vc.), Piano (Pno.), and Electric Bass (El.). The Flute and Clarinet parts feature complex sixteenth-note passages with slurs and accents. The Violin and Viola parts have sustained chords. The Piano part has a rhythmic accompaniment with triplets. The Electric Bass part has a complex, syncopated line. A conductor cue is indicated by a box labeled 'H' and an arrow pointing to the start of the Clarinet part.

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Musical score for measures 95-104. The score includes staves for Flute (Fl.), Clarinet (Cl.), Violin (Vln.), Viola (Vc.), Piano (Pno.), and Electric Bass (El.). The Flute and Clarinet parts continue with complex sixteenth-note passages, including crescendos and slurs. The Violin and Viola parts have sustained chords with crescendos. The Piano part has a rhythmic accompaniment with triplets and crescendos. The Electric Bass part has a complex, syncopated line.

100

Fl.

5 5 6 6 6 7 *fff*

Cl.

fff

Vln.

fff

Vc.

fff

Pno.

fff

El.



I

irregular pulse

104

Fl.

fff 6 6 etc.

Cl.

fff 3 3 3 5 6

Vln.

fff 5 5 3 3 3 3 5 5 3 5 6

Vc.

fff 5 5 6 5 5 6 5 6 5 6

Pno.

fff 5 5 6 6

El.

Cue 8 (has effects based on partial of Cue 2 and Cue 7 for all inputs, plus slight reverb effects)

112

Fl. *ff sub.* *fff sub.*

Cl. *ff* *fff sub.*

Vln. *ff sub.*

Vc. *f* *ff* *fff sub.*

Pno. *fff*

El.



116

Fl. *f sub.* *fff*

Cl. *f sub.*

Vln. *f sub.* *fff*

Vc. *f sub.* *fff*

Pno. *f sub.* *fff*

El.

K

122

Fl. *ff sub.* 3

Cl. *ff sub.*

Vln. *mf* 5 5 5 5 5 3

Vc. *ff sub.*

Pno. *mf* 6 6 6 6 6 6

Cue 10 (reduce effects amount of Cue 9 and add metallic and brassy effects to Cl. and Cello)

El.

==

128

Fl. 3 5 6

Cl. 3 5

Vln. *f* *mf sub.* 5 5 5 5 5 5

Vc. 5

Pno. 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6

El.

134

Fl.

Cl.

Vln.

Vc.

Pno.

El.

piu f

ff

[illegible]

L

146

Fl.

Cl.

Vln.

Vc.

Pno.

El.

Cue 11 (add freezing, spectral delay, pitch shift and reverb effects to piano)



154

Fl.

Cl.

Vln.

Vc.

Pno.

El.

159

Fl.

Cl.

Vln.

Vc.

Pno.

El.

mp *mf*

3 3 3 5 3

5 6

5 5 5 5 5 6

162

Fl.

Cl.

Vln.

Vc.

Pno.

El.

M

ff *fp* *f* *mf* *f*

3 5 3 5

3 6

6 6 6 6 6 6

Cue 12 (combination of freezing, spectral delay and reverb effects)

172

Fl.

Cl.

Vln.

Vc.

Pno.

El.

178

Fl.

Cl.

Vln.

Vc.

Pno.

El.

O

182

Fl.

Cl.

Vln.

Vc.

Pno.

El.

Cue 14
(decrease strengths of relative effects used in Cue 12)

188

Fl.

Cl.

Vln.

Vc.

Pno.

El.

211

Fl. *mf* *f* *mf sub.*

Cl. *mf* *mp*

Vln. *mf* *f* *mf sub.*

Vc. *mf* *mp* *mf*

Pno.

Fl.

216

Fl. *p* *pp*

Cl. *ppp*

Vln. *mf* *pp* *mf* *pp* *mf* *pp* *mp*

Vc. *mp sub.*

Pno.

Pno.

play with finger lightly on D string and glissando up and down on the string